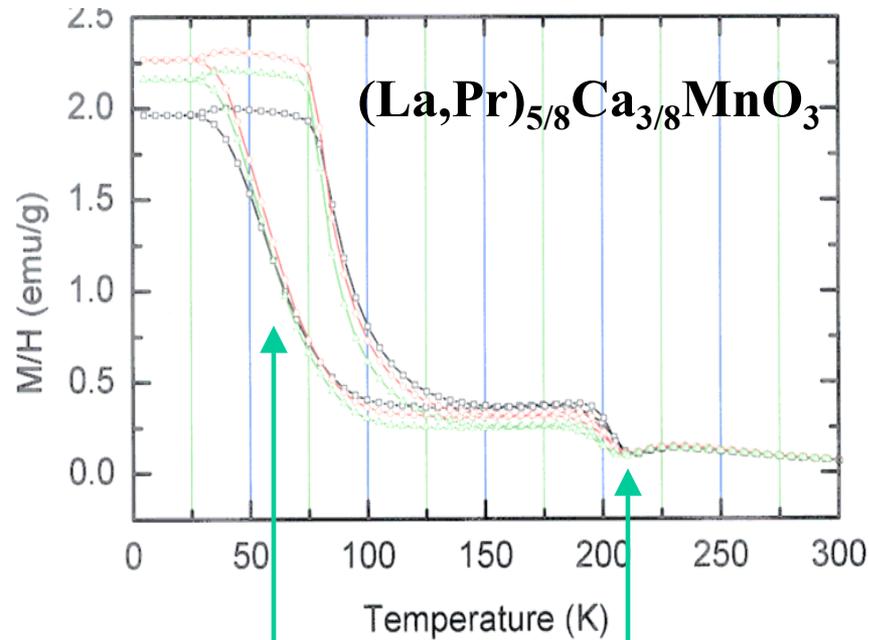


Mesoscopic landscape of ferromagnetic manganites

New state of matter with nano-structures ! DMR-0103858

Fresnel-mode Lorentz TEM images
of a novel ferromagnet



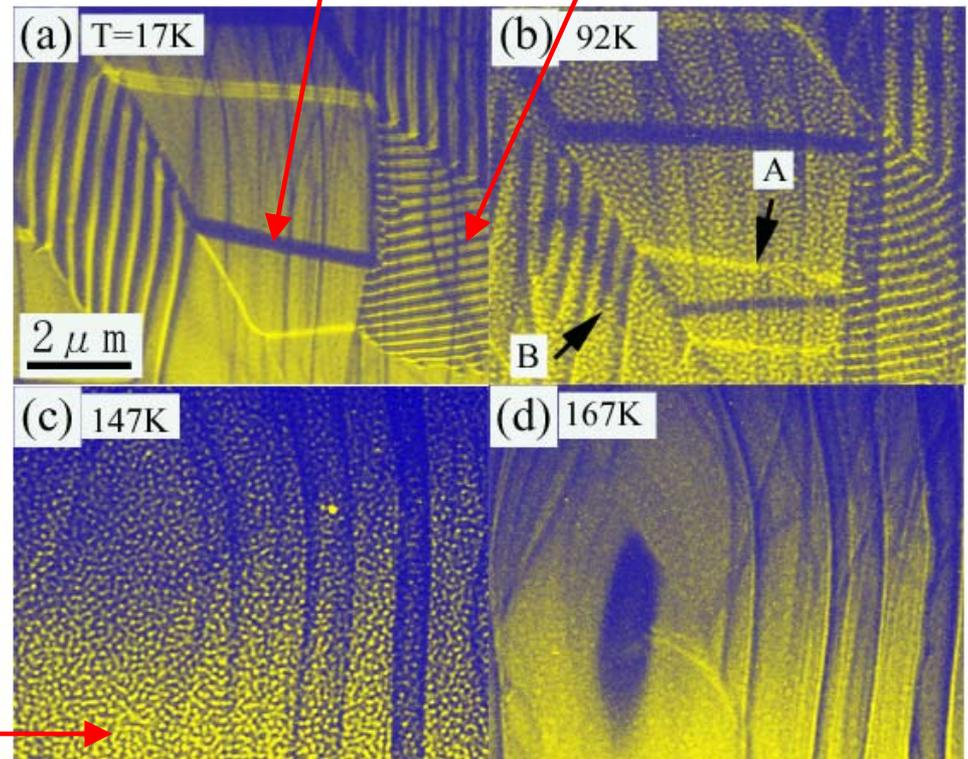
T_c

Magnetic Burns temp.

FM nano-droplets

Regular FM domains

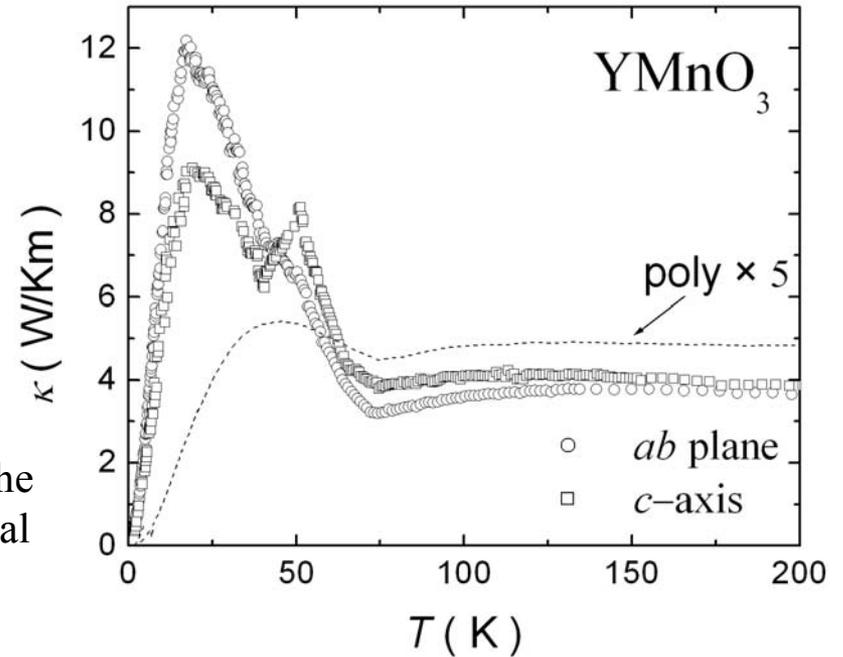
Stripe FM domains



Education & inter-institutional collaboration.



Upper: Derya Yinanc, an undergraduate student in the undergraduate honor's program, is measuring thermal conductivity. Right: κ data by Yinanc on magnetic/ferroelectric YMnO_3 are shown.



High school student (Leo Barinov) in the Partners in Science Program (sponsored by Liberty Science Center, New Jersey) and an undergraduate student (Derya Yinanc) in the undergraduate honor's program at Rutgers have studied (thermal-)transport properties of materials with simultaneous magnetism and ferroelectricity. In addition, undergraduate students (Michael Deleon and Zhiqian Chen) at New Jersey Institute of Technologies (supervised by Trevor Tyson) are involved in collaborative experiments at Rutgers.